

We claim:

1. A multiservice switching system, comprising:

a switching device having predetermined functions with respect to a request for a predetermined service;

5 a switch controller having a bearer function and a virtual switch function for controlling said switching device; and

a proxy device containing at least one of service policies and logic related to one of enabling and denying said predetermined service, in which multiple service requests are correlated with respective services to enable at least one appropriate policy and logic.

10 2. The multiservice switching system of claim 1, wherein said switching device and said switch controller comprise a conventional switch.

3. The multiservice switching system of claim 2, wherein said conventional switch comprises an ATM Switch.

15 4. The multiservice switching system of claim 2, wherein said switching device and said switch controller comprise a next generation switch.

5. The multiservice switching system of claim 1, further comprising a service controller, said service controller including said switch controller.

20 6. The multiservice switching system of claim 1, wherein said switching device includes said switch controller.

7. A method for switching plural forms of data, comprising:

having an initiating customer request a service;

obtaining predetermined data related to the requested service;

instructing the initiating customer to initiate a predetermined setup

25 identifying the requested service, when the requested service is permitted;

passing a predetermined signal across a network in response to the

predetermined setup; and

initiating a second predetermined setup, in response to the passed predetermined signal, to one of accept and reject the requested service, the second predetermined signal being provided to the initiating customer, in which multiple service requests are correlated with respective services to enable at least one appropriate policy and logic.

8. The method of claim 7, wherein obtaining comprises pushing the predetermined data.

9. The method of claim 8, wherein the pushing predetermined data comprises pushing at least one of policy and logic representing at least one of service capabilities and service permissions.

10. The method of claim 7, wherein obtaining comprises pulling the predetermined data.

11. The method of claim 7, wherein obtaining comprises querying a service control module for the predetermined data.

12. The method of claim 7, further comprising using a certificate to specify permitted setup parameters.

13. The method of claim 12, further comprising encrypting the certificate.

14. The method of claim 13, further comprising assigning a sequence number to the encrypted certificate.

15. The method of claim 12, wherein the certificate further identifies which service allowed the setup.

16. The method of claim 12, further comprising determining whether the certificate is valid.

17. The method of claim 12, further comprising preventing reuse of the certificate.

18. The method of claim 17, wherein preventing comprises examining a sequence number assigned to the certificate to determine whether the sequence number was seen before.

5 19. The method of claim 17, wherein preventing comprises examining at least one of a time-stamp and a date-stamp to determine wherein the at least one of the time-stamp and the date-stamp exceeds a predetermined delta value.

sub  
a2  
10 20. A method for switching plural forms of data, comprising:  
initiating a service request by an initiating customer;  
establishing the service request using a predetermined setup; and  
initiating a second predetermined setup to one of accept and reject the requested service, in which multiple service requests are correlated with respective services to enable at least one appropriate policy and logic.

21. The method of claim 20, wherein establishing the service request comprises using a pushing procedure.

15 22. The method of claim 20, wherein establishing the service request comprises using a pulling procedure.

23. The method of claim 20, wherein establishing the service request comprises using a query procedure.

20 24. The method of claim 20, further comprising a Service Control that requests that the initiating customer initiate a user-to network interface setup.

25 25. The method of claim 20, wherein the service request is transferred over an ATM network, the predetermined setup being redirected from a switching device to a service controller.

26. The method of claim 25, further comprising controlling the switching device with a switch controller, the switch controller being integral with the switching device.

27. The method of claim 25, further comprising controlling the switching device with a switch controller, the switch controller being integral with the service controller.

28. The method of claim 20, wherein establishing further comprises including a certificate for establishing the service request using the predetermined setup.

29. The method of claim 28, wherein the certificate specifies permitted setup parameters.

30. The method of claim 28, further comprising encrypting the certificate.

31. The method of claim 30, further comprising assigning a sequence number to the encrypted certificate.

32. The method of claim 28, wherein the certificate further identifies which service allowed the setup.

33. The method of claim 28, further comprising determining whether the certificate is valid.

34. The method of claim 28, further comprising preventing reuse of the certificate.

35. The method of claim 34, wherein preventing comprises examining a sequence number assigned to the certificate to determine whether the sequence number was previously examined.

36. The method of claim 34, wherein preventing comprises examining at least one of a time-stamp and a date-stamp to determine whether the at least one of the time-stamp and the date-stamp exceeds a predetermined delta value.

37. The method of claim 7, wherein the predetermined setup comprises a UNI setup, the predetermined signal comprises a PNNI protocol, and the second predetermined setup comprises a second UNI setup.

add  
as

$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) \delta(x-a) dx = f(a)$